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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,781

04/14/2006

Marcus Eh

51103

3806

1609 7590 02/19/2010

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

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WASHINGTON,, DC 20036

EXAMINER

BROWN, COURTNEY A

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

02/19/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,781	Applicant(s) EH ET AL.	
	Examiner COURTNEY BROWN	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 19, 2009 has been entered.

Acknowledgement of Receipt/Status of Claims

This Office Action is in response to the amendment filed November 19, 2009. Claims **1-14** are pending in the application. Claims 1 and 4 have been amended. Claims 8-14 have been withdrawn as being directed to a non-elected invention. Claims 1-7 and are being examined for patentability.

Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

Withdrawn Rejections

The rejection of claims 1-3 are rejected under 35 U.S.C. 112, first paragraph has been **withdrawn**.

The rejection of claims 1-7 under 35 U.S.C. 103(a) over Paget et al. (AU-B-71940/94) in view of Anderson et al. (US Patent 6,479,682 B1) has been **withdrawn**.

New Rejection(s) Necessitated by the Amendment filed on November 19,

2009

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

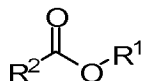
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Patent 6,627,763 B2) in view of Anderson et al. (US Patent 6,479,682 B1, previously cited in the rejection filed June 9, 2009, referred to as '682') as evidenced by Merriam-Webster's Online Dictionary, (<http://www.merriam-webster.com/>).

Applicant's Invention

Applicant claims a method for the spontaneous release of a fragrance having the steps: A.) providing a compound of formula I;



Compound of formula I

Art Unit: 1616

B.) producing a formulation which comprises the compound of formula I and a medium, such that the compound of formula I is stable in the formulation, wherein said medium is acidic and oxidative and has a water content of less than or equal to 10 wt.% relative to the total mass of the medium; and

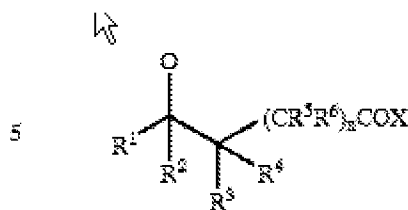
C.) treating said formulation such that the compound of formula I disintegrates and the fragrance is released.

***Determination of the scope and the content of the prior art
(MPEP 2141.01)***

Anderson et al. teach compounds with protected hydroxy groups of
Formula (Ia, which corresponds to formula I of Anderson et al.):



wherein Y is



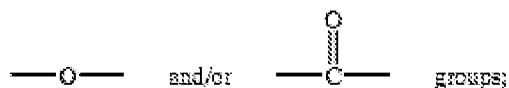
m is an integer of 1 or greater; n is 1, 2 or 3;

R₁, R₂, R₃, R₄, R₅ and R₆ represent independently

hydrogen, substituted or unsubstituted alkyl-, alkenyl-, alkynyl-, cycloalkyl-,

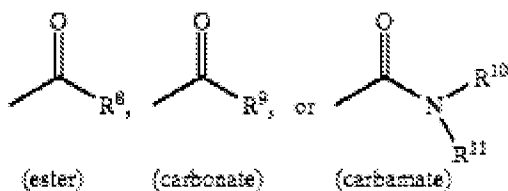
cycloalkenyl- or aromatic radicals which can additionally contain one or more

Art Unit: 1616



whereby one or two rings can be built by the combination of the respective R1 to R6 groups and these ring(s) can be substituted with one or more alkyl group; X is -OR7 and R7 is the residue of an alcohol R7OH, or the residue of the enol form of an aldehyde or ketone, or X is a primary or secondary amino group forming an amide;

Z is



q is the same or greater than m; R8 is hydrogen, a straight or branched, unsubstituted or substituted alkyl-, alkenyl-, cycloalkyl-, cycloalkenyl- or aromatic radical which optionally includes and/or is substituted with one or more heteroatoms, and/or group(s) including a heteroatom, preferably by --CO--, OCOR7, COOR7, COY, Si and/or N; R9 is the residue --OR12 of an alcohol of formula R12 OH or the residue of the enol form of an aldehyde or ketone or has the definition given for Y and R9 where Y can be the same or different and optionally includes and/or is substituted with a heteroatom, and/or group(s) including a heteroatom; R10 and R11

Art Unit: 1616

represent independently hydrogen, substituted or unsubstituted alkyl, alkenyl, cycloalkyl, cycloalkenyl or an aromatic residue which optionally includes and/or is substituted with one or more heteroatoms, and/or group(s) containing a heteroatom (column 2, line 60 bridging to column 2, lines 1-56).

These compounds are **precursors for organoleptic agents**, such as fragrances, and masking agents and for antimicrobial agents. When activated, the compounds of formula (Ia) are cleaved and form one or more organoleptic and/or antimicrobial compounds (abstract). The compounds of formula (Ia) are virtually odorless under room temperature, atmospheric conditions and about 20 to 100% relative humidity. However, under activating conditions, they are cleaved and one or more active compounds with organoleptic and/or antimicrobial properties are generated.

Anderson et al. teach that the phrases "activating conditions" or "activated" are used interchangeably and are intended to mean those conditions which lead to cleavage of the compounds of formula (Ia) and the formation of "active," i.e., organoleptic and/or antimicrobial agents. For example, the following activating conditions lead to cleavage of compounds of formula (Ia) and to formation of the desired active compounds: skin bacteria, especially axilla bacteria; enzymes such as protease or lipase; elevated temperature; **acidic or alkaline pH-values**; and/or light (column 3, lines 4-20). The compounds of formula (Ia) may be employed as fragrance precursors in a variety of compositions, including, for example, **personal care products, laundry products, cleaning compositions**, pet care products and environment scents such as air fresheners (column 5, line 65 bridging to column 6, lines 1-5). When the compounds of

Art Unit: 1616

formula (I) are employed as fragrance precursors and precursors for odor masking agents, they are present in such compositions individually in an amount effective to enhance or to mask the characteristic odor of a material. More commonly, however, the compounds are mixed with other fragrance components in an amount sufficient to provide the desired odor characteristics. Due to the **in situ** generation of the active compounds, Anderson et al. teach that the desired effect is prolonged and the substantivity on different substrates is enhanced (column 6, lines 8-18). Upon cleavage, the compounds of formula (Ia) form lactones and optionally **aldehydes** (column 3, lines 20-23 of Anderson et al.) such as **decanal, dec-9-enal, dec-4-enal, and octanal** as listed on page 10 of the instant specification (compounds of instant formula I, column 6, lines 25 bridging to column 7, line 29 of Anderson et al.) and/ or **ketones** (column 3, lines 20-23 of Anderson et al.) such as **carvone and acetophenone** as listed on page 11 of the instant specification (compounds of instant formula I, column 6, lines 25 bridging to column 7, line 29 of Anderson et al.).

According to Webster's Online Dictionary, "**in situ**" means: in the natural or original position or place. According to Webster's Online Dictionary, "**spontaneous**": means: **1** : proceeding from natural feeling or native tendency without external constraint ; **2** : arising from a momentary impulse; **3** : controlled and directed internally ; **4** : produced without being planted or without human labor; **5** : developing or occurring without apparent external influence, force, cause, or treatment and **6** : not apparently contrived or manipulated. Thus, it is the Examiner's position that the "in situ" generation of the active compounds of Anderson et al. is a spontaneous event.

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Anderson et al. is that Anderson et al. do not expressly teach a method of producing a formulation which is comprised the compound of instant formula I in a medium has a water content of less than or equal to 10 wt% relative to the total mass of the medium. This deficiency in Anderson et al. is cured by Anderson et al.(i.e., ‘682’). ‘682’ teach methods and compositions comprising compounds of instant formula I to provide compounds which are precursors for organoleptic compounds such as fragrance or masking agents (column 1, lines 13-16) that are cleaved under different activating conditions and are stable under transport and storage conditions (column 1, lines 51-57).

Regarding the amount of water present in the instant sour and oxidative medium, Anderson et al. teach water in amounts less than 10% . This includes amounts all the way to 0% (see example 55 a and b, column 23 bridging to column 24, lines 1-44). One of ordinary skill in the art would have been motivated to utilize water in low amounts based on the teachings of Anderson et al. It would have been obvious to one of ordinary skill in the art at the time of the invention to engage in routine experimentation to determine optimal or workable ranges for water that produce expected results. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. ***In re Aller, 220 F. 2d 454, 105 USPQ 233 (CCPA 1955).***

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of the two cited references to arrive at a method for the release of a fragrance in an acidic and oxidative medium that has a water content of less than or equal to 10 wt% relative to the total mass of the medium. One of ordinary skill in the art would have been motivated to make this combination with the expected benefit of having a method to provide fragrant precursors in more than one type of composition that can be used for an array of products. Further, both references provide methods for the release of a fragrance using the same fragrance precursor compositions. Thus, in view of *In re Kerkhoven*, 205 USPQ 1069 (C.C.P.A. 1980), it is *prima facie* obvious to combine two or more compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in prior art, thus claims that requires no more than mixing together two or three conventional fragrance precursor compositions set forth *prima facie* obvious subject matter.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

Art Unit: 1616

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments, filed November 19, 2009 with respect to the rejection of claims 1-3 under 35 U.S.C. 112, first paragraph have been considered but are moot in view of Applicant's amendment.

Applicant's arguments, filed November 19, 2009, with respect to the 103 rejection of claims 1-7 over Paget et al. (AU-B-71940/94) in view of Anderson et al. (US Patent 6,479,682 B1) have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The claims remain rejected.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney A. Brown whose telephone number is 571-270-3284. The examiner can normally be reached on 9:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Courtney A. Brown
Patent Examiner
Technology Center 1600
Group Art Unit 1616

/Ernst V Arnold/
Primary Examiner, Art Unit 1616